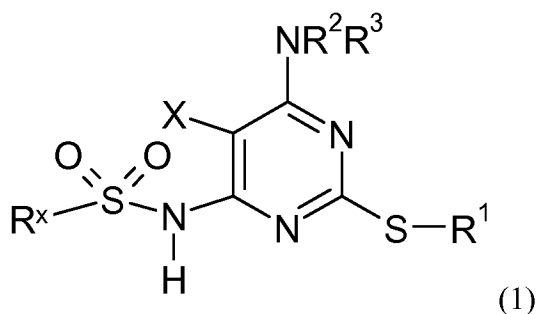


Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1. (Previously Presented) A compound of formula (1) or a pharmaceutically acceptable salt thereof:



wherein R<sup>1</sup> is a group selected from C<sub>3-7</sub>carbocyclyl, C<sub>1-8</sub>alkyl, C<sub>2-6</sub>alkenyl and C<sub>2-6</sub>alkynyl;  
wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from fluoro, nitrile, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, phenyl or heteroaryl; wherein phenyl and heteroaryl are optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1-6</sub>alkyl and trifluoromethyl;

wherein R<sup>2</sup> is C<sub>3-7</sub>carbocyclyl, optionally substituted by 1, 2 or 3 substituents independently selected from:

(a) fluoro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>;

- (b) a 3-8 membered ring optionally containing 1, 2 or 3 atoms selected from O, S, -NR<sup>8</sup> and whereby the ring is optionally substituted by C<sub>1-3</sub>alkyl or fluoro; or
- (c) phenyl or heteroaryl, each of which is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1-6</sub>alkyl and trifluoromethyl;

or R<sup>2</sup> is a group selected from C<sub>1-8</sub>alkyl, C<sub>2-6</sub>alkenyl or C<sub>2-6</sub>alkynyl wherein the group is substituted by 1, 2 or 3 substituents independently selected from hydroxy, amino, C<sub>1-6</sub>alkoxy, C<sub>1-6</sub>alkylamino, di(C<sub>1-6</sub>alkyl)amino, *N*-(C<sub>1-6</sub>alkyl)-*N*-(phenyl)amino, *N*-C<sub>1-6</sub>alkylcarbamoyl, *N,N*-di(C<sub>1-6</sub>alkyl)carbamoyl, *N*-(C<sub>1-6</sub>alkyl)-*N*-(phenyl)carbamoyl, carboxy, phenoxycarbonyl, -NR<sup>8</sup>COR<sup>9</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup> and -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>;

wherein R<sup>3</sup> is hydrogen or independently R<sup>2</sup>;

R<sup>4</sup> is hydrogen or a group selected from C<sub>1-6</sub>alkyl and phenyl, wherein the group is optionally substituted by 1 or 2 substituents independently selected from halo, phenyl, -OR<sup>11</sup> and -NR<sup>12</sup>R<sup>13</sup>;

R<sup>5</sup> and R<sup>6</sup> are independently hydrogen or a group selected from C<sub>1-6</sub>alkyl and phenyl wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, phenyl, -OR<sup>14</sup>, -NR<sup>15</sup>R<sup>16</sup>, -COOR<sup>14</sup>, -CONR<sup>15</sup>R<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SONR<sup>15</sup>R<sup>16</sup> and NR<sup>15</sup>SO<sub>2</sub>R<sup>16</sup> or

R<sup>5</sup> and R<sup>6</sup> together with the nitrogen atom to which they are attached form a 4- to 7-membered saturated heterocyclic ring system optionally containing a further heteroatom selected from oxygen and nitrogen atoms, which ring is optionally substituted by 1, 2 or 3 substituents independently selected from phenyl, -OR<sup>14</sup>, -COOR<sup>14</sup>, -NR<sup>15</sup>R<sup>16</sup>, -CONR<sup>15</sup>R<sup>16</sup>, -NR<sup>15</sup>COR<sup>16</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SONR<sup>15</sup>R<sup>16</sup>, NR<sup>15</sup>SO<sub>2</sub>R<sup>16</sup> or C<sub>1-6</sub>alkyl (optionally substituted by 1 or 2 substituents independently selected from halo, -NR<sup>15</sup>R<sup>16</sup> and -OR<sup>17</sup> groups);

R<sup>10</sup> is hydrogen or a group selected from C<sub>1-6</sub>alkyl or phenyl, wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, phenyl, -OR<sup>17</sup> and -NR<sup>15</sup>R<sup>16</sup>; and

each of R<sup>7</sup>, R<sup>8</sup>, R<sup>9</sup>, R<sup>11</sup>, R<sup>12</sup>, R<sup>13</sup>, R<sup>14</sup>, R<sup>15</sup>, R<sup>16</sup>, R<sup>17</sup> is independently hydrogen, C<sub>1-6</sub>alkyl or phenyl;

X is hydrogen, halo, cyano, nitro, hydroxy, C<sub>1-6</sub>alkoxy (optionally substituted by 1 or 2 substituents selected from halo, -OR<sup>11</sup> and -NR<sup>12</sup>R<sup>13</sup>), -NR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, thio, C<sub>1-6</sub>alkylthio (optionally substituted by 1 or 2 substituents selected from halo, -OR<sup>17</sup>, -NR<sup>15</sup>R<sup>16</sup>), -SO<sub>2</sub>R<sup>10</sup> or a group selected from C<sub>3-7</sub>carbocyclyl, C<sub>1-8</sub>alkyl, C<sub>2-6</sub>alkenyl or C<sub>2-6</sub>alkynyl, wherein the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup> and -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>;

R<sup>x</sup> is trifluoromethyl, -NR<sup>5</sup>R<sup>6</sup>, phenyl, naphthyl, monocyclic or bicyclic heteroaryl wherein a heteroring may be partially or fully saturated and one or more ring carbon atoms may form a carbonyl group, and wherein each phenyl or heteroaryl group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COR<sup>7</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1-6</sub>alkyl or trifluoromethyl; or R<sup>x</sup> is a group selected from C<sub>3-7</sub>carbocyclyl, C<sub>1-8</sub>alkyl, C<sub>2-6</sub>alkenyl and C<sub>2-6</sub>alkynyl whereby the group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COR<sup>7</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, phenyl or heteroaryl; and wherein each phenyl or heteroaryl group is optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COR<sup>7</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1-6</sub>alkyl or trifluoromethyl;

or R<sup>x</sup> and X together form a 4 to 8-membered sulfonamide ring optionally substituted by 1, 2 or 3 substituents independently selected from halo, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, phenyl or heteroaryl; wherein phenyl and

heteroaryl are optionally substituted by 1, 2 or 3 substituents independently selected from halo, cyano, nitro, -OR<sup>4</sup>, -NR<sup>5</sup>R<sup>6</sup>, -CONR<sup>5</sup>R<sup>6</sup>, -COOR<sup>7</sup>, -NR<sup>8</sup>COR<sup>9</sup>, -SR<sup>10</sup>, -SO<sub>2</sub>R<sup>10</sup>, -SO<sub>2</sub>NR<sup>5</sup>R<sup>6</sup>, -NR<sup>8</sup>SO<sub>2</sub>R<sup>9</sup>, C<sub>1-6</sub>alkyl and trifluoromethyl.

2. (Previously Presented) A compound or a pharmaceutically acceptable salt thereof according to claim 1 wherein R<sup>2</sup> is C<sub>1-8</sub>alkyl substituted by 1 or 2 hydroxy substituents.

3. (Previously Presented) A compound or a pharmaceutically acceptable salt thereof according to claim 1 wherein R<sup>1</sup> is benzyl optionally substituted by 1, 2 or 3 substituents independently selected from fluoro, chloro, bromo, methoxy, methyl and trifluoromethyl.

4. (Previously Presented) A compound or a pharmaceutically acceptable salt thereof according to claim 1 wherein R<sup>3</sup> is hydrogen.

5. (Previously Presented) A compound or a pharmaceutically acceptable salt thereof according to claim 1 wherein X is hydrogen.

6. (Previously Presented) A compound or a pharmaceutically acceptable salt thereof according to claim 1 wherein R<sup>x</sup> is methyl, 1-methylimidazolyl, 1,2-dimethylimidazolyl, *N,N*-dimethylamino, azetidiny, pyrrolidiny, morpholiny and piperidiny.

7. (Previously Presented) A compound that is *N*-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)methanesulfonamide or a pharmaceutically acceptable salt thereof.

Claims 8-13 (Cancelled)

14. (Previously Presented) A pharmaceutical composition comprising a compound or a pharmaceutically acceptable salt thereof according to claim 1; and a pharmaceutically-acceptable diluent or carrier.

Claims 15-18 (Cancelled).

19. (Previously Presented) A pharmaceutical composition which comprises a compound of formula (1) as defined in claim 1 or a pharmaceutically acceptable salt thereof, in conjunction with another pharmaceutical agent.

20. (Previously presented) A pharmaceutical composition as claimed in claim 19 wherein the amount of the compound in the composition is effective for treating asthma, allergic rhinitis, COPD, inflammatory bowel disease, irritable bowel syndrome, osteoarthritis, osteoporosis, rheumatoid arthritis, or psoriasis.

21. (Cancelled)

22. (Previously Presented) A compound that is *N*-[2-[(3-Chloro-2-fluorobenzyl)thio]-6-[(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-4-morpholinesulfonamide or a pharmaceutically acceptable salt thereof.

23. (Previously Presented) A compound that is *N*-[2-[[3-Chloro-2-fluorophenyl)methyl]thio]-6-[(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-1,2-dimethyl-1H-imidazole-4-sulfonamide or a pharmaceutically acceptable salt thereof.

24. (Previously Presented) A compound that is *N*-(2-[(2,3-Difluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)piperidine-1-sulfonamide or a pharmaceutically acceptable salt thereof.

25. (Previously Presented) A compound that is *N*-(2-[(2,3-Difluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)pyrrolidine-1-sulfonamide or a pharmaceutically acceptable salt thereof.
26. (Previously Presented) A compound that is *N*-(2-[(2,3-Difluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)azetidine-1-sulfonamide or a pharmaceutically acceptable salt thereof.
27. (Previously Presented) A compound that is *N*-{6-{[(1*R*)-2-Hydroxy-1-methylethyl]amino}-2-[(2,3,4-trifluorobenzyl)thio]-pyrimidin-4-yl}morpholine-4-sulfonamide or a pharmaceutically acceptable salt thereof.
28. (Previously Presented) A compound that is *N*-(2-[(2,3-Difluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}pyrimidin-4-yl)morpholine-4-sulfonamide or a pharmaceutically acceptable salt thereof.
29. (Previously Presented) A compound that is *N*-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)azetidine-1-sulfonamide or a pharmaceutically acceptable salt thereof.
30. (Previously Presented) A compound that is *N*-{6-{[(1*R*)-2-Hydroxy-1-methylethyl]amino}-2-[(2,3,4-trifluorobenzyl)thio]-pyrimidin-4-yl}azetidine-1-sulfonamide or a pharmaceutically acceptable salt thereof.
31. (Previously Presented) A compound that is *N*-(2-[(3-Chloro-2-fluorobenzyl)thio]-6-{[(1*R*)-2-hydroxy-1-methylethyl]amino}-pyrimidin-4-yl)-*N,N*-dimethylsulfamide or a pharmaceutically acceptable salt thereof.

32. (Previously Presented) A compound that is *N*-[2-[[[3-Chloro-2-fluorophenyl)methyl]thio]-6-[(*R*)-(2-hydroxy-1-methylethyl)amino]-4-pyrimidinyl]-1-methyl-1H-imidazole-4-sulfonamide or a pharmaceutically acceptable salt thereof.